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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,290	11/25/2003	Thomas Koithan	WEAT/0310	5565

36735 7590 01/29/2007  
PATTERSON & SHERIDAN, L.L.P.  
3040 POST OAK BOULEVARD, SUITE 1500  
HOUSTON, TX 77056

EXAMINER
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DANG, HOANG C

ART UNIT	PAPER NUMBER
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3672

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/29/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/723,290

Applicant(s)

KOITHAN ET AL.

Examiner

Hoang Dang

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3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-9,13-21,24-26 and 28-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-9,13-21,24-26 and 28-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11/2/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under Ex Parte Quayle, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submission filed on 11/02/2006 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 5-9, 13-21, 24, 25 and 28-34 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Galle, Jr. et al (US 2003/0178847) (see figures 1-3; Paragraphs [0014], [0029], [0030] and [0005]).

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 3, 5-9, 13-21 and 24, 25 and 28-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vincent et al ('063) in view of Galle, Jr. et al '847

Vincent et al disclose the invention as claimed except that Vincent et al monitor the rate of change in torque with respect to time whereas the claims call for monitoring the rate of change in torque with respect to rotation. However, Galle, Jr. et al teach a method of making up threaded connections wherein the rate of change in torque with respect to rotation may be monitored to detect a shoulder condition to improve the connection sealing and fatigue life when the pipe is subsequently subjected to loading (see paragraphs [0014], [0029], [0030] and [0005]). It would have been a matter of choice and obvious to one of ordinary skill in the art at the time the invention was made to use the rate of change in torque with relative to rotation to control the making up of a threaded connection of Vincent et al in view of the teaching of Galle, Jr. et al '847 for the advantage pointed out above.

It is noted that although Vincent et al '063 disclose in column 5, lines 15-26 that the prior torque-turns technique is unacceptable and unsuitable for premium threaded connections as pointed out by applicant in the amendment filed 5/18/2006, one of ordinary skill in the art would have readily recognized that the rate of change in torque relative to rotation may be used in Vincent et al in view of the teaching of Galle, Jr. et al. Obviousness may exist although teachings relied upon may be disclosed in the art as non-preferred or unsatisfactory for the intended

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purpose. *In re Boe*, 53 CCPA 1079; 355 F2d 961; 158 USPQ 507. *In re Smith*, 32 CCPA 959; 148 F2d 351; 65 USPQ 167. *In re Nehrenberg*, 47 CCPA 1159; 280 F2d 161; 126 USPQ 383. *In re Watanabe*, 50 CCPA 1175; 315 F2d 924; 137 USPQ 350.

As for claim 29, see column 3, lines 23-35.

As for claim 35, see column 10, lines 18-28 and 36-44.

6. Claims 26, 36-39 and 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vincent et al ('063) in view of Galle, Jr. et al '847 as applied to claim 24 above, and further in view of Bromell (3,662,842) or Juhasz et al (US 6,443,241).

Vincent et al, as modified by Galle, Jr. et al '847, disclose the invention as claimed except that Vincent et al disclose that their apparatus can be mounted to any suitable type of threaded pipe connecting apparatus, generally referred to in the petroleum industry as power tongs (column 3, lines 38-45) whereas the claims call for a top drive. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the apparatus of Vincent et al as modified by Galle, Jr. et al '847 to a top drive as claimed because it is known in the art to use a top drive unit to connect or disconnect pipe sections as evidenced by Bromell (see figures 2-5 and column 3, lines 17-32 and column 4, lines 3-9) or Juhasz et al (column 6, lines 34-47).

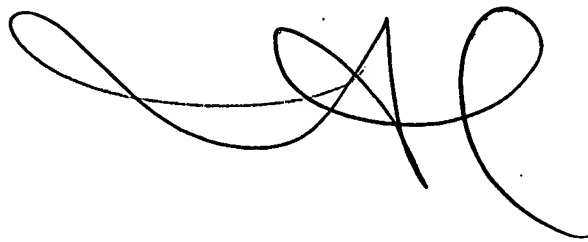
### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Dang whose telephone number is 571-272-7028. The examiner can normally be reached on 9:15-5:45 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000:

Hoang Dang  
Primary Examiner  
Art Unit 3672

A handwritten signature in black ink, appearing to be 'HD' with a large loop and a trailing flourish.